

## Notice of Allowability

Application No.

09/964,690

Examiner

Holly Rickman

Applicant(s)

LEE ET AL.

Art Unit

1773

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the interview held 9/27/04.
2. ☒ The allowed claim(s) is/are 1-4, 6-15, 17-19, now renumbered 1-17.
3. ☒ The drawings filed on 28 September 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08);  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 09272004.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Raj Davé on 9/27/04.

The application has been amended as follows:

Claim 1, line 4, "40Å" has been deleted and ---35Å--- has been inserted therefor;

line 5, ---, wherein the niobium-containing seedlayer further comprises a metal selected from the group consisting of boron, titanium, vanadium, chromium, zirconium, molybdenum, ruthenium, tantalum, and mixtures thereof" has been inserted after "layer"

Claim 2, lines 2-3, "a thickness from about 1Å to about 35Å," has been deleted.

Claim 6, line 2, "5" has been deleted and ---1--- has been inserted therefor.

Claim 12, line 4, "40Å" has been deleted and ---35Å--- has been inserted therefor;

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line 5, ---, wherein the niobium-containing seedlayer further comprises a metal selected from the group consisting of boron, titanium, vanadium, chromium, zirconium, molybdenum, ruthenium, tantalum, and mixtures thereof" has been inserted after "layer".

Claim 13, line 2, "a thickness from about 1Å to about 35Å," has been deleted.

Claim 17, line 1, "16" has been deleted and ---12--- has been inserted therefor.

Claims 5, 16, and 20 have been canceled.

***STATEMENT OF REASONS FOR ALLOWANCE***

The following is an examiner's statement of reasons for allowance: An interview with Mr. Raj Dave was held on September 27, 2004. In this interview, the amendment of claims 1 and 12 to recite a range having an upper limit of 35 Angstroms was discussed. The examiner indicated this amendment would overcome the Bian reference but the claims would still read on a newly discovered reference to Wong et al. (US 6558811), now of record. The examiner indicated that Wong et al. fails to teach or suggest the limitations of claim 5. Mr. Dave agreed to an examiner's amendment putting the limitations of claim 5 into the independent claims in order to overcome Wong et al. and also to the amendment of the independent claims to recite an upper limit of about 35 Angstroms thereby overcoming Bian.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Holly Rickman whose telephone number is (571) 272-1514. The examiner can normally be reached on Monday-Friday 9:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Holly Rickman  
Primary Examiner  
Art Unit 1773

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September 27, 2004